Resident Funded Retirement Village Valuations: Complications with the Application of the DCF

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Abstract

Retirement Village assets are different from traditional residential assets due to their operation in accordance with statutory legislation. Designed for independent living, retirement villages provide either detached or semi-detached residential dwellings with car parking and small private yards with community facilities providing a shared congregational area for village activities and socialising.

In essence, the village operator provides the land and buildings to the residents who pay an amount on entry for the right of occupation. On departure from the units an agreed proportion of either the original purchase price or the sale price is paid to the outgoing resident. As on-going levies are typically offset by on-going operational expenses, the market value of the operator's interest in the Retirement Village is therefore predominantly based upon the estimated future income from Deferred Management Fees and Capital Gain upon roll-over receivable by the operator in accordance with the respective residency agreements. Given the lumpiness of these payments, there is general acceptance that the most appropriate approach to valuation is through Discounted Cash Flow (DCF) analysis.

There is however inconsistency between valuers across Australia in how they undertake their DCF analysis, leading to differences in reported values and subsequent confusion among users of valuation services. To give guidance to valuers and enhance confidence from users of valuation services this paper investigates the five major elements of discounted cash flow methodology, namely cash flows, escalation factors, holding period, terminal value and discount rate.

Introduction

Valuers can be called upon to provide valuations for a range of purposes and under various circumstances with respect to Retirement Villages. This paper outlines the methodology in the valuation of the operator's interest of resident funded retirement villages in Australia. Typically there are three component parts to a resident funded retirement village, namely:

(1) The operator's interest in the existing independent living units (ILUs) and serviced apartments (SAs) which are occupied by residents under contractual arrangements, affording the operator the right to receive income from deferred management fees (DMFs) and subsequent resales/roll-overs;

(2) The resident's interest in their respective ILU or SA subject to contractual arrangements; and

(3) The operator's interest in any undeveloped land, which may be subsequently developed with either ILUs or SAs.

The role of the valuer and subsequent valuation methodologies which may be applied depends on the nature of the component part and typically involves a sum of the parts (1) and (3) above, such that the total value of the property may involve the separate parts being individually assessed through their respective most appropriate method and then summed together.

This paper is based on the views and opinions expressed by a range of valuers through semi-structured interviews, each being appropriately qualified/registered and Certified Practising Valuer members of the Australian Property Institute, and working in or with a sound knowledge of the valuation of retirement villages. Research through informal semi-structured interviews allowed the interviewees to talk freely about the issues, actual experiences and practices with regard to the valuation of resident funded retirement villages. The interviewer was thus able to pursue particular lines of discussion with regard to past and current experiences and outlooks for the future in a more exploratory manner (Saunders 2000).

The range and scope of experience of the seven interviewed valuers was diverse and provided a cross section of opinions and reflected perspectives from senior and junior practitioners within the valuation profession. More particularly, four of the interviewed valuers held senior positions (Manager/Director) within major valuation practices and each had in excess of ten years of practical experience. One of the interviewees had between five and ten years experience and whilst being a qualified valuer had a role with an operator/developer as an Analyst. The sixth interviewee held a more junior role with a major valuation firm with less than five years experience.

Valuation Methods

Having regard to current theoretical literature and current valuation practice, the value of the operator's interests in existing ILUs and SAs (1) are typically assessed through a Discounted Cash Flow (DCF) approach whilst the value of any surplus land (3) is typically assessed through the hypothetical development feasibility or residual approach. The residual approach involves the assessment of the gross realisation of the hypothetical development, from which we then deduct all costs incurred and also an allowance for profit and risk to determine the residual land value (Whipple 2006; Reed 2007).

This paper is particularly focused on the Discounted Cash Flow methodology (Keating & Brace 1994; Whipple 2006; Reed 2007), which is utilized for the existing occupied and unoccupied ILUs and SAs (1) within a mature village. The future income source for such an asset is contingent upon the future roll-over of residents and the disbursement of Deferred Management Fees (DMF) and shares in Capital Gains upon resale. Given the lumpiness of these uncertain rollovers, a cash flow methodology is considered most appropriate, which may then be checked through direct comparison on a rate per unit basis (Willison, Rich & Gaffney 2007).

The direct comparison approach, which is the primary approach for traditional residential assets such as houses and units (Whipple 2006; Reed 2007), is considered as only a secondary approach in the valuation of retirement villages due to the variation in resident occupancy agreements within individual villages, let alone between different villages, and across different State borders. Ownership structures within retirement villages can be quite varied (Dirkis 1991), and may include:

- Freehold strata/community title
- Leasehold
- License
- Company title
- Unit trust

- Manufactured home

Consequently the differences in ownership structure, entry contributions, calculation of entry fees, shares in capital gains, expected time until resident departure and expected re-sale prices (Dirkis 1991), let alone differences in location, village size and quality of improvements and community facilities renders the Direct Comparison approach a secondary approach for this class of assets.

According to the Valuers that were interviewed, they may be called upon to determine the value of an individual unit or apartment (2) within a Village. In these instances then a Valuer may rely on the direct comparison approach having regard to comparisons in terms of the village and the resident's agreements. It is essential that in assessing the value for an individual unit, the Valuer takes into account the terms and conditions of the occupancy agreements for the units utilised as sales evidence in comparison to the subject unit and makes allowances for differences, most notably in the structure of the deferred management fees and sharing of capital gains. These differentials may be shown in a matrix format. It may be possible to have regard to sales within the same Village on similar terms, however where outside evidence is sought, the Valuer must have regard to the characteristics and peculiarities of the Villages and the terms and conditions of the individual agreements.

Whilst important to the parties (village operator and resident) involved and often required to meet re-sale timeframes under the legislation, the interviewed Valuers stated that their more substantial work will involve the determination of Market Value of the operator's interest of the entire Village, having regard to the income flows from the Deferred Management Fees and Exit Fees receivable under the resident agreements to occupy. Given the intricacies involved and detailed within this paper, the valuation of retirement villages in Australia is considered a specialist field and requires the Valuer to have an intimate knowledge of the workings of the retirement village industry, the relevant Retirement Village legislation within each State/Territory and the mechanics of individual occupancy agreements (Elliot, Earl & Reed 2002).

Retirement Village assets differ from traditional residential assets due to their operation in accordance with statutory legislation. In Australia, each State and Territory has its own Retirement Village Act and Regulations, as follows:

Australian Capital Territory	*Fair Trading Act 1992 (Retirement Villages Industry Code of Practice)*
New South Wales	*Retirement Villages Act 1999* and the *Retirement Villages Regulation 2009*
Northern Territory	*Retirement Villages Act 1995* and the *Retirement Villages Regulations*
Queensland	*Retirement Villages Act 1999* and the *Retirement Villages Regulation 2000*
South Australia	*Retirement Villages Act 1987* and the *Retirement Villages Regulations 2006*
Tasmania	*Retirement Villages Act 2004* and the *Retirement Villages Regulations 2005*
Victoria	*Retirement Villages Act 1986* and the *Retirement Villages (*Contractual Arrangements) *Regulations 2006* and *Retirement Villages (Records and Notices) Regulations 2005*
Western Australia	*Retirement Villages Act 1992* and the *Retirement Villages Regulations 1992*

The objectives of these Acts and regulations are to promote greater consumer protection by providing a framework for the operation of retirement villages in accordance with approved schemes. In Queensland a retirement village is defined as premises where older members of the community or retired persons reside, or are to reside, in independent living units or serviced units, under a retirement village scheme. A retirement village scheme is subsequently broadly defined as a scheme under which a person enters into a residence contract; and in consideration for paying an ingoing contribution, acquires a right to reside in a retirement village, and on payment of the relevant charge, acquires a right to receive at least one service in relation to the retirement village (Retirement Villages Act 1999).

Residents typically "purchase" their unit from the village operator, generally at a discount to the cost of similar accommodation in the open residential market. In return for this discount, the residents agree to pay to the retirement village operator a Deferred Management Fee (DMF) when they leave the village. The DMF or exit fee may be calculated as a percentage of entry contribution that was paid or the achieved resale price and may include a sharing of any capital gain and other fees and charges (Dirkis 1991; Elliot, Earl & Reed 2002; McMullen & Day 2007).

For most purposes the assessment of value of the operator's interest will be based on the definition of market value subject to existing resident contracts/agreements. Market Value is defined by the International Valuation Standards Committee and endorsed in Australia by the Australian Property Institute (2008) as "the estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently, and without compulsion".

The DMF typically ranges from 20 to 45% over 5 to 10 years (McMullen & Day 2007; Gelbert & Harris 2008). It may be calculated on the residents' original purchase price or the amount that the resident sells their unit for upon exit. Residents may also share in capital gains proceeds from the sale of their unit. Departure fees typically comprise one of three possible structures which may be summarized as follows:

1	The fee is a percentage of the entry price, which accrues over time at a specified rate; together with an entitlement to all of the capital gain that may have accrued.
2	The fee is a percentage of the entry price, which accrues over time at a specified rate; together with a previously agreed proportionate share in the capital gain that may have accrued.
3	The fee is a percentage of the re-sale price when the unit is sold, leased or licensed to a subsequent new resident (which by its nature includes both a share in the entry price and a share in any capital gain).

On a day to day basis, residents pay for the costs of providing services to the village, namely security patrols, rates and insurance, as part of their General Services Charge (GSC). In Queensland, residents also contribute to a Maintenance Reserve Fund (MRF), which covers the maintenance, but not the replacement of village assets (Retirement Villages Act 1999). Between the GSF and the MRF, residents pay a rate that is heavily discounted to the true cost of providing village infrastructure such as a pool and community centre. The DMF therefore compensates the operator for providing these services over the years to the residents (Elliot, Earl & Reed 2002; McMullen & Day 2007).

In short, the market value of the operator's interest in the ILUs and SAs within a Village is based upon the estimated future income from Deferred Management Fees and Capital Gain upon roll-over. Given the lumpiness of these payments, the most appropriate approach to valuation is considered to be through DCF analysis, and noting that there are inconsistencies between valuers across Australia in how they prepare their cashflows, the balance of this paper will focus on the elements of the DCF (Willison, Rich & Gaffney 2007).

Discounted Cash Flow Methodology

The DCF valuation methodology converts current and future cash flows to a present day equivalent or present value over the holding period of an investment at an appropriate discount rate. Consequently there are five (5) major elements to a DCF (Whipple 2006; Reed 2007), being:

- Cash Flows (both positive and negative)
- Escalation Factors
- The Holding Period
- A Terminal Value, and
- The Discount Rate.

These elements are expanded upon as follows:

Cash Flows

DCF estimates current and future cash flows (positive and negative) and discounts them back to a present value. This requires projections of future incomes and costs, which are influenced by many factors. The accuracy of these future projections is one of the major difficulties facing the DCF approach.

Deferred Management Fees (DMF), also known as Exit or Departure Fees, comprise the payment made to an operator upon a resident terminating occupancy and vacating their unit. There is a strong correlation between the strength of the residential market and demand for independent living units, whilst serviced apartments are generally an influenced purchase due to an individual's declining health. Simply put, residents of a village will fund the purchase of their unit through the sale of their former residence. Residents will typically seek to purchase their unit and retain some funds from the sale of their previous residence for themselves. Therefore, there is a slight lag in house price movements and village price movements. The amount payable is affected by the terms and conditions of the DMF agreement entered into upon entry by the resident into the village. There are lots of different DMF contracts in the market, with variations from village to village and from State to State. In short as there are inconsistencies across the market, direct comparison between villages is difficult, thus supporting the use of a DCF framework. Typically the DMF is related to the duration of occupation by the resident (McMullen & Day 2007; Willison, Rich & Gaffney 2007).

A typical residency agreement may include 25% of the ingoing contribution accruing over the first 2 to 7 years of occupation together with 50% of the capital gains. The structure of the DMF has typically reflected the vagaries of the broader residential market, such that as the first part of this Century saw strong growth in the residential property market, much in line with general economic prosperity, this translated into higher entry prices being paid for village units together with operators demanding (and receiving) more in terms of higher percentages with regard to the ingoing contribution and share of capital gain (McMullen & Day 2007).

Within the cash flow calculation the valuer must have regard to the peculiarities of each unit on a line by line basis taking into account the current resident's characteristics and subsequent assumptions about the timing of initial roll-over together with escalations in pricing of the units to calculate the respective DMF and share in capital gain .

To determine the timing of the first roll-over, the valuer must have regard to the age and gender of the existing resident in each unit, and then have regard to the Life Tables. Life tables are a statistical model prepared by the Australian Bureau of Statistics and presented separately for males and females. Life tables are available from the Australian Bureau of Statistics and due to their size and format, have not been incorporated within the text of this document.

In undertaking a valuation, the latest Tables should be utilised by the valuer. To calculate when existing residents are expected to roll over:

- The valuer must determine the current age of the existing resident;
- Then referring to the Life Tables, and having regard to the resident's gender and current age, the valuer calculates the expected number of years to that particular resident's death;
- And then adjust the number of years to death by an x factor.

Why decrease by an x factor? Not everyone leaves a retirement village because of death. They may leave the Village for a variety of other reasons, including relocating to a higher care facility, or just vacating for personal reasons (Keating & Brace 1994). The x factor is typically 2 to 3 years.

This calculates the expected date for the first cash flow event or rollover. Subsequent roll-overs are then assumed on a rolling basis in accordance with adopted averages and escalations, typically between 8 and 12 years. Estimating rollovers is subjective with the actual number of rollovers varying from year to year and from village to village. Obviously the assessed value can vary dramatically due to make up and take in of residents.

Business valuers typically vary from property valuers by using a stochastic model, which randomises the subsequent rollovers (Keating & Brace 1994).

Therefore, for each village unit's contract, within the cash flow, the valuer needs to make two calculations, namely the percentage of DMF receivable by the operator contingent on the terms of agreement, percentage recoverable and estimated length of stay, together with the capital gain between the entry price and the expected sale price at the time of roll-over. Within the cash flow the valuer must therefore be aware of the particulars of each and every resident contract to determine the correct amounts. The pricing of each individual unit should be checked against each other and with units within other Villages to maintain parity and relativity with the broader residential property market.

Along with the forecast cash inflows upon roll-overs, there are expenses or costs that are incurred over the holding period, including:

- Capital replacement fund (non recoverable form resident in Queensland)
- Costs of sale
  - Typically 1.5 to 3%
  - May be recoverable, dependent on State and Contract

- Overheads
  - Head office management costs are not recoverable from residents.
- Refurbishment of Unit
  - Typically recoverable dependent on State and Contract
  - Eg. New paint, new carpet
  - Every 15 years need to refurbish village

With regard to refurbishment costs, there are two approaches. The first is to incorporate the refurbishment costs and therefore step change the "price" of the ILU or SA to reflect the refurbishment or alternatively the valuer does not include the refurbishment cost and therefore does not incorporate the step change in the ILU or SA prices.

Escalation Factors

The Escalation Rates are the rates at which individual cash flow elements will grow over time due to the influence of the Time Value of Money (Whipple 2006; Reed 2007).

Within the cash flow, the "price" of each individual ILU and SA is escalated from the date of valuation so that the capital gain can be calculated on future roll-overs. Similarly the costs incurred in the refurbishment, marketing and on-going running of the Village are escalated.

Traditional cash flows for commercial and retail properties often escalate incomes at a relatively low growth rate based on the Consumer Price Index (CPI) plus a premium. Consequently price growth for ILUs is usually in the order of 4 to 5% whilst price growth for SAs is slightly less in the order of 3 to 5%. The market for SAs is more limited than that for ILUs due to their narrower appeal to residents with increasing/higher care needs and typically for a shorter duration of stay.

Alternatively, there are views that residential property markets out perform CPI and as such a higher escalation rate on prices of up to 6.5% should be adopted. However, much of this escalation may be from two factors: improvement in quality of product and therefore not a true capital gain on like-for-like, and greater access to financing that may have given a one-off boost to property prices. As a result, future price increases may be more inline with CPI.

Costs are typically escalated throughout the cash flow in line with escalations in the Consumer Price Index (CPI).

There is a direct relationship between the escalation rates and overall discount rate adopted within the cash flow (Whipple 2006; Reed 2007), and as such the major problem for valuers is the identification of the:

- Growth rate drivers
- Discount rate drivers

Typically more expensive units are more sensitive to growth rates due to the compounding effect, whilst other units remain sensitive to the discount rate.

The Holding Period

The Holding Period is the length of time that the study period will cover. Whilst the holding period for traditional investment property assets, such as office buildings and retail shopping centres, is typically in the order of 10 or 5 years, the holding period for retirement village valuation cash flows is typically much longer to take into account the lumpy and irregular nature of the cash flows (Whipple 2006; Reed 2007).

There appears to be two distinct approaches with regard to holding periods in the cash flow calculations for retirement villages. These range from a holding period in the order of 20 to 30 years with a Terminal Value against a holding period in the order of 50 years with no Terminal Value.

The shorter the holding period the more contingent the current market value will be on the Terminal Value calculation. Consequently given Time Value of Money discounting over the respective holding periods, the current value outcomes under a 26 year model with Terminal Value is typically very similar or marginally above that for a 50 year model without Terminal Value.

The shorter (20 to 30 year) cash flow is typically around 26 years, which allows for 2.5 roll-overs for each unit within the cash flow assuming an average occupancy of 8 to 12 years. A further variation adopted by some valuation firms is to run a 20-year model with terminal value based on a further 20 year period. In essence this is a hybrid of the previous methods, capturing a 40 year investment horizon and a suitable number of roll-overs. If the holding period is too short then an insufficient number of roll-overs are captured and therefore may not present an accurate portrayal of the asset's value.

A Terminal Value

The Terminal Value is the cash amount in the final period representing the net proceeds of the hypothetical sale of the property asset at the end of the study period as a proxy for future income beyond the holding period (Whipple 2006; Reed 2007).

For a 26 year cash flow model, the Terminal Value may be based on the average roll-overs for the previous 9 years where the roll-overs are adopted on a 9 yearly basis. Valuers have opted for more conservative numbers for the roll-overs if a range of options is provided. Roll-over numbers may be affected by an industry trend that shows that average age of current residents attracts new residents of similar age.

The Discount Rate

The Discount Rate is the targeted rate of return for the asset based on a pre-tax weighted average cost of capital. International Accounting Standard 36, at paragraphs 55 states that "in measuring value in use, the discount rate used should be the pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the asset" and at paragraph 56 states further that "the discount rate should not reflect risks for which future cash flows have been adjusted and should equal the rate of return that investors would require if they were to choose an investment that would generate cash flows equivalent to those expected from the asset."

In accordance with International Valuation Standards, discount rates should be selected from comparable properties or businesses in the market. In order for these properties to be comparable, the revenue, expenses, risk, inflation, real rates of return, and income projections for the properties must be similar to those of the subject property. There are business risks peculiar to the operation of retirement villages, including the uncertainty of timing of rollovers in the cashflow, which are different to those for the holding of traditional commercial office and retail or industrial properties, and as such a softer discount rate is adopted.

In recent years, discount rates have typically ranged from 13 to 15% for an individual Village, with firmer discount rates from 10 to 12% adopted in revaluations as part of a portfolio. These rates have softened out in recent times, reflecting softening economic conditions following the Global Financial Crisis of 2008, to now range from 12.5% to 13.5%.

Conclusions

In considering the aforementioned aspects with regard to each element of the DCF, it becomes apparent that retirement villages have maturity periods which impact significantly on their rate of return. Immaturity produces low returns and conversely, maturity is rewarded with higher returns. The maturity of a village can change significantly over time as residents come and go. Maturity may be assessed in terms of a series of inter-related measures including:

- The expected average length of stay of each resident;
- The rate of resident exits;
- Average age of residents as at the assessed date;
- Average age of residents as at the date of individual entry.

Along with maturity, other important determinants on value include:

- The marketability of the units, both demographically and geographically.
- The quality of the location of the village.
- The quality of the improvements, including level of functional and economic obsolescence.
- The reputation of the village.
- The overall state of the residential market.
- Taxation issues.
- The number and type of resident contracts.
- The ability of resident contracts to provide for the recovery of operating costs and produce a return.
- The Village's maturity as reflected in its resident profiles.

Overall, the most appropriate valuation methodology to utilise in the valuation of the operator's interest in resident funded retirement villages is considered to be the discounted cash flow approach based on either a 26 year holding period with terminal value or a 50 year holding period without terminal value. These lengths of holding period will allow a sufficient minimum number of roll-overs and balance out the lumpy and irregular nature of the cash flows to appropriately calculate market value.

Whilst there is often reported resident dissatisfaction with the financial structuring of the DMF in residency agreements, as long as there are future financial returns receivable by the Village Operator, then DCF will continue to be the most appropriate valuation methodology.

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